

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Masakazu SUZUKI, et al.

Serial No.

Group Art Unit:

Confirmation No.

Filed: November 30, 2001

Examiner:

For: DEVICE DRIVER APPARATUS

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Prior to the examination of the above-identified application, please amend the claims as follows:

The following amendments and remarks are respectfully submitted. Reconsideration of the claims is respectfully requested.

**IN THE CLAIMS:**

Please REPLACE claims 3-9 in accordance with the following:

3. The device driver apparatus according to claim 1, wherein  
said adapter notifies said driver of command upon receipt of the command from the  
initiator, said driver notifies the PIO process of the notified command, the PIO process returns  
status being a reply to said driver, said driver notifies said adapter of the status, and said  
adapter returns the status to the initiator.

4. The device driver apparatus according to claim 1, wherein  
said adapter notifies said driver of command upon receipt of the command from the  
initiator, said driver notifies the PIO process of the notified command, the PIO process returns a  
buffer address to said driver after preparing data, and setting the data in a buffer, said driver

sets the buffer address in a register of said adapter, and said adapter extracts the data from the buffer address set in the register, and transmits the extracted data to the initiator.

5. The device driver apparatus according to claim 1, wherein  
said adapter notifies said driver of command upon receipt of the command from the initiator, said driver notifies the PIO process of the notified command, the PIO process prepares a buffer, and returns a buffer address to said driver, said driver sets the buffer address in a register of said adapter, said adapter stores data that is requested of the initiator and received at the buffer address set in the register, and notifies said driver that the data has been stored, said driver notifies the PIO process that the data has been received, the PIO process extracts the data from the buffer, and returns status being a reply to said driver, said driver sets the status in a register of said adapter, and said adapter returns the status to the initiator.

6. The device driver apparatus according to claim 1, wherein  
said driver is configured by a low-order driver for said adapter, a high-order driver for the PIO process, and a medium-order driver transmitting/receiving a signal between the low-order driver and the high-order driver.

7. The device driver apparatus according to claim 1, wherein  
the PIO process notifies said adapter or said driver of an error, and said adapter or said driver makes the notified error occur.

8. The device driver apparatus according to claim 1, wherein  
the PIO process simulates an actual I/O device by transmitting/receiving status or data of a specified I/O device.

9. The device driver apparatus according to claim 1, wherein  
the PIO process simulates an error test of an actual I/O device by making a specified error occur when status or data of a specified I/O device is transmitted or received.

**REMARKS**

In accordance with the foregoing, claims 3-9 have been amended. Claims 1-9 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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By:

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE****IN THE CLAIMS:**

Please AMEND the following claims:

3. The device driver apparatus according to claim 1 [or 2], wherein said adapter notifies said driver of command upon receipt of the command from the initiator, said driver notifies the PIO process of the notified command, the PIO process returns status being a reply to said driver, said driver notifies said adapter of the status, and said adapter returns the status to the initiator.

4. The device driver apparatus according to claim 1, [2, or 3,] wherein said adapter notifies said driver of command upon receipt of the command from the initiator, said driver notifies the PIO process of the notified command, the PIO process returns a buffer address to said driver after preparing data, and setting the data in a buffer, said driver sets the buffer address in a register of said adapter, and said adapter extracts the data from the buffer address set in the register, and transmits the extracted data to the initiator.

5. The device driver apparatus according to claim 1, [2, 3, or 4,] wherein said adapter notifies said driver of command upon receipt of the command from the initiator, said driver notifies the PIO process of the notified command, the PIO process prepares a buffer, and returns a buffer address to said driver, said driver sets the buffer address in a register of said adapter, said adapter stores data that is requested of the initiator and received at the buffer address set in the register, and notifies said driver that the data has been stored, said driver notifies the PIO process that the data has been received, the PIO process extracts the data from the buffer, and returns status being a reply to said driver, said driver sets the status in a register of said adapter, and said adapter returns the status to the initiator.

6. The device driver apparatus according to claim 1, [2, 3, 4, or 5,] wherein said driver is configured by a low-order driver for said adapter, a high-order driver for the PIO process, and a medium-order driver transmitting/receiving a signal between the low-order driver and the high-order driver.

7. The device driver apparatus according to claim 1, [2, 3, 4, or 5,] wherein the PIO process notifies said adapter or said driver of an error, and said adapter or said driver makes the notified error occur.

8. The device driver apparatus according to claim 1, [2, 3, 4, 5, 6, or 7,] wherein the PIO process simulates an actual I/O device by transmitting/receiving status or data of a specified I/O device.

9. The device driver apparatus according to claim 1, [2, 3, 4, 5, 6, 7, or 8,] wherein the PIO process simulates an error test of an actual I/O device by making a specified error occur when status or data of a specified I/O device is transmitted or received.